Section I (Amendments to the Claims)

Please amend claim 14 as set out in the following listing of the claims of the application.

Please cancel claims 1, 2, 4, 5, 7, 8, and 15 without prejudice.

Please add new claim 16.

1-8. (Cancelled)

9. (Withdrawn) A kit for the diagnosis of Alzheimer's disease or an early stage of or a predisposition for this disease, the kit containing the following constituents:

(a) a compound for mitogenic stimulation; and

(b) at least one antibody directed against a surface marker expressed after mitogenic stimulation.

10. (Withdrawn) The kit according to claim 9, also containing:

(a) an anticogulative compound; and/or

(b) a buffer for cell lysis.

11. (Withdrawn) The kit according to claim 9, wherein the antibody is an antibody bound to a magnetic particle.

12. (Withdrawn) The kit according to claim 9, wherein the antibody is an anti-CD69 antibody.

13. (Withdrawn) The kit according to claim 9, which also contains an anti-CD4 and/or CD8 antibody.

14. (Currently amended) A method of determining a mitogenic stimulation index for diagnosing patients suffering from Alzheimer's disease by means of a patient sample and a mitogenically stimulated CD69 surface marker, the method comprising the steps of:

(a) obtaining a blood sample from a patient wherein the sample comprises a cell population comprising lymphocytes and stabilizing the blood sample by adding one or more anticoagulative compounds to the blood sample;

(b) quantification of the lymphocytes within the cell population bearing the CD69 surface marker for mitogenic stimulation;

(c) mitogenic stimulation of the cell population by phytohemagglutinin (PHA) or pokeweed mitogen (PWM);

(d) quantification of the lymphocytes within the mitogenically stimulated cell population bearing the CD69 surface marker after step (c), the lymphocytes bearing the CD69 surface marker being separated from the lymphocytes bearing no CD69 surface marker by means of antibodies directed against the CD69 surface marker, wherein the antibodies are bound to magnetic particles and the separation is carried out via immunomagnetic separation; and

(e) calculation of the stimulation index as the quotient of the number of lymphocytes bearing the CD69 surface marker by dividing the number obtained from step (d) by the number obtained from step (b), wherein the stimulation index which reaches at least 10, as a maximum 100, is a sign of Alzheimer's disease in a patient sample from a patient suffering from Alzheimer's disease.

15. (Cancelled)

16. (New) A method of determining a mitogenic stimulation index by means of a patient sample and a mitogenically stimulated CD69 surface marker, the method comprising the steps of:

(a) obtaining a blood sample from a patient wherein the sample comprises a cell population comprising lymphocytes and stabilizing the blood sample by adding one or more anticoagulative compounds to the blood sample;

(b) quantification of the lymphocytes within the cell population bearing the CD69 surface marker for mitogenic stimulation;

(c) mitogenic stimulation of the cell population by phytohemagglutinin (PHA) or pokeweed mitogen (PWM);

(d) quantification of the lymphocytes within the mitogenically stimulated cell population bearing the CD69 surface marker after step (c), the lymphocytes bearing the CD69 surface marker being separated from the lymphocytes bearing no CD69 surface marker by means of antibodies directed against the CD69 surface marker, wherein the antibodies are bound to magnetic particles and the separation is carried out via immunomagnetic separation; and

(e) calculation of the stimulation index as the quotient of the number of lymphocytes bearing the CD69 surface marker by dividing the number obtained from step (d) by the number obtained from step (b), wherein the stimulation index which reaches at least 10, as a maximum 100, is a sign of Alzheimer's disease in a patient sample.